

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/500,493
Source: PL/10
Date Processed by STIC: 2/14/05

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 02/14/2005

PATENT APPLICATION: US/10/500,493

TIME: 08:08:38

Input Set : A:\14848-006US1.TXT

Output Set: N:\CRF4\02142005\J500493.raw

```

4 <110> APPLICANT: Shuster, Samuel J.
5       Arvidsson, Ulf N.G.
6       Stone, Laura S.
7       Zhang, Hong-Yan
8       Hart, Lucy Vulchanova
10 <120> TITLE OF INVENTION: Methods and Materials for Modulating
11      TRPC4
13 <130> FILE REFERENCE: 14848/006US1
15 <140> CURRENT APPLICATION NUMBER: 10/500,493
16 <141> CURRENT FILING DATE: 2004-06-29
18 <150> PRIOR APPLICATION NUMBER: PCT/US02/41751
19 <151> PRIOR FILING DATE: 2002-12-31
21 <150> PRIOR APPLICATION NUMBER: 60/346,171
22 <151> PRIOR FILING DATE: 2001-12-31
24 <160> NUMBER OF SEQ ID NOS: 3
26 <170> SOFTWARE: FastSEQ for Windows Version 4.0
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 3012
30 <212> TYPE: DNA
31 <213> ORGANISM: Rattus norvegicus
33 <400> SEQUENCE: 1
34 gactagcatg gcctgaagca tggctcagtt ctattacaaa cgaaatgtca acgcccccta 60
35 ccgagaccgc atcccactga ggatcgctcag ggcagaatct gaactctcac catcagagaa 120
36 agcctacttg aatgccgtgg aaaaggggga ctatgcaagc gtcaagaaat ctctggagga 180
37 agccgagatt tattttaaaa tcaacattaa ctgcattgac ccccttggga ggactgctct 240
38 tctcattgcc attgaaaatg agaacctgga gctgattgaa ctgttggtga gtttcaatgt 300
39 ctatgttggc gatgcgctac ttcacgccat caggaaagag gtggttggag ccgtggagct 360
40 actgctgaac cacaaaaagc ccagcggaga gaagcaggtg cctcccatcc tccttgacaa 420
41 acagttctct gaattcaccc cagacatcac gcctatcatc ttggctgcac atacaaataa 480
42 ttatgagata atcaaaactc tgggtccagaa ggggtgtctc gtgcccagac cccacgaggt 540
43 ccgctgtaac tgtgttgagt gtgtctccag ctacagcgtg gacagcctca ggcactcacg 600
44 gtccaggtct aacatctaca aggccttggc cagcccctcg ctcatcgcg tgtcaagtga 660
45 agaccctttc ctcaccgcct ttcagttaag ctgggagctg caagaactga gtaagggtga 720
46 gaatgaattc aagtcggagt atgaggagct gtctagacag tgcaaacagt ttgctaagga 780
47 cctcctagat cagacacgga gttccagaga gctggaaatc attcttaatt accgtgatga 840
48 caatagcctg atcgaagaac agagtggaaa tgatcttgcg aggctaaaat tagccattaa 900
49 gtaccgtcaa aaagagtttg ttgctcagcc caactgcca gagctgcttg cttcccgtgt 960
50 gtacgatgag ttcccaggct ggaggagaag acactgggcg gtgaagatgg tgacatgttt 1020
51 cataatagga ctactcttcc ccgtcttctc cgtgtgtac ctgatagctc ccaaaagccc 1080
52 acttggaactg ttcattcagaa agccatttat caagtttatc tgccacacag cctcctatct 1140
53 gacctttttg tttctgctgc tgctagcctc tcagcacatc gacagggtcag acttgaacag 1200
54 gcaagggtcca ccaccaacca tcgtggagtg gatgatatta ccgtgggtcc tgggttttat 1260
55 atggggagag attaaacaga tgtgggatgg cggactccag gattacatcc acgactggtg 1320

```

RAW SEQUENCE LISTING

DATE: 02/14/2005

PATENT APPLICATION: US/10/500,493

TIME: 08:08:38

Input Set : A:\14848-006US1.TXT

Output Set: N:\CRF4\02142005\J500493.raw

```

56 gaatctaattg gacttttgtga tgaactcctt gtatctggcg acaatctcct tgaagattgt 1380
57 cgcatttgta aagtacagtg ctctgaaccc acgggaatca tgggacatgt ggcaccccac 1440
58 cctggtggca gaggttttat tgcgaattgc aaacatcttc agttccctcc gcctgatctc 1500
59 tctgttcact gccaatcttc acctggggcc tctgcagata tctctgggaa gaatgctcct 1560
60 ggacatccta aagttcttat tcatatactg cctcgtgctg ctacttttg caaatggcct 1620
61 aaatcaactg tactttact atgaagaaac gaaggggtta agctgcaaag gcatacggtg 1680
62 cgaaaaacag aacaacgcgt tctccacgtt atttgagact ctacagtccc tgttttggtc 1740
63 aatatttgga ctcatcaatc tctatgttac caatgtcaaa gccagcatg agttcactga 1800
64 ttttgttggg gccaccatgt ttggcacata taacgtcatc tctctggttg tctcctgaa 1860
65 catgctgacg gctatgatga ataattctta ccaactaatt gccgaccacg cagatataga 1920
66 gtggaaattt gctcgaacaa agctttggat gagctacttt gaagaagggg gtaccctgcc 1980
67 tacacctttc aatgtcatcc caagcccca gtcctgtggg tacctggtca agtggatatg 2040
68 gacacactta tgtaaagaaa aaatgagaag aaagccagaa agctttggga caatcgggcg 2100
69 gcgtgctgct gataacttga gaaggcatca ccaataccaa gaggtgatga ggaatctggt 2160
70 gaagcggtag gtggcagcca tgatcagaga ggcaaaaact gaagaaggct tgacagagga 2220
71 gaatgttaag gaactaaagc aagacatttc tagcttccgc ttcgaagttc tgggattgct 2280
72 ccggggaagc aagctctcaa caatacagtc agccaacgca gcgagttcag ccagctccgc 2340
73 ggactccgat gagaagagcc acagcgaagg taatggcaag gacaagagaa agaactcag 2400
74 cctctttgat ttaaccactc tgatccaccc gcggtcggca gtcattgcct ccgagagaca 2460
75 taacctaaagc aatggttctg cctggtggt gcaggagccg cccagggaga agcagaggaa 2520
76 agtgaatttt gtggttgata tcaaaaactt cgggttattt catagacggt caaagcaaaa 2580
77 tgctgctgag caaaacgcaa accaaatctt ctctgtttca gaagaaatta ctctcaaca 2640
78 ggccggcagga gcacttgaga gaaatatcca actggaatcc aaaggattag cttcacgggg 2700
79 tgaccgcagc attcctggtc tcaatgaaca gtgtgtgcta gtagaccata gagaaaggaa 2760
80 tacggacact ttgggtttac aggtaggcaa gagagtgtgc tctccttca agtcggagaa 2820
81 ggtggtggtg gaagacaccg tccctattat accaaaggag aaacacgccc aggaggagga 2880
82 ctcaagcata gattatgatt taagccccac ggacacagtt gccatgaag attatgtgac 2940
83 cagcagattg tgacaacttg gagaaggagt gtttaccata cctatacata ttttccatag 3000
84 tgctctgggc ag                                     3012
86 <210> SEQ ID NO: 2
87 <211> LENGTH: 3440
88 <212> TYPE: DNA
89 <213> ORGANISM: Homo sapiens
91 <400> SEQUENCE: 2
92 gctttcagag catcctcact ccgcccagtt cgggtgccagc tgcgtgggct ccagcttcga 60
93 tcgttttctt tgggaatgctc caaaactcag cagcgactaa ggaattcca ttggaatttg 120
94 ccgggcgtgc tctcaccctc cagggcaccg gcgccgtcag tctcggatc ccatcacttc 180
95 agcccgaaga ttgcaacttt gcagagacga agaaatagca tggcatgaaa tatggctcag 240
96 ttctattaca aaagaaatgt taatgctccc tatagagacc gcatccctct aaggatagta 300
97 agagcagaat cagaactctc gccatcagaa aaagcctact tgaatgctgt ggaaaaggga 360
98 gattatgcca gtgtcaagaa atccctagag gaagctgaaa tttattttta aatcaatatt 420
99 aattgcattg atcctctcgg aagaactgct ctctcattg caattgaaaa tgagaacttg 480
100 gagctcatcg aactactctt aagctttaat gtctatgttg gagatgctct attacatgct 540
101 atcagaaaag aagtcgtcgg agctgttgag ctgttattga accacaaaaa acctagtga 600
102 gaaaaaacag tgcctcctat actccttgat aagcagttct ctgaattcac tccagacatt 660
103 acaccaatca ttttggcagc ccatacaaat aattatgaga taataaaaact cttggttcag 720
104 aaaggagtct cagtgcctcg accccacgag gtccgctgta actgtgtgga atgcgtgtcc 780
105 agttcagatg tggacagcct ccgtcactca cgctccagac tcaacatcta caaggccttg 840
106 gccagtcctt ctctcattgc actgtcaagc gaagatcctt ttctcacagc ctttcagtta 900

```

RAW SEQUENCE LISTING

DATE: 02/14/2005

PATENT APPLICATION: US/10/500,493

TIME: 08:08:38

Input Set : A:\14848-006US1.TXT

Output Set: N:\CRF4\02142005\J500493.raw

```

107 agttgggaac ttcaggaact gagcaaggtg gaaaatgaat tcaagtcgga gtatgaagag 960
108 ctgtcacggc agtgcaaaca atttgctaag gacctactgg atcagacgag aagttccaga 1020
109 gaactggaaa tcattcttaa ttaccgagat gacaatagtc tcatagaaga acaaagtggga 1080
110 aatgatcttg caagactaaa attggccatt aagtaccgtc aaaaagagtt tggtgcccag 1140
111 cccaattgtc aacagctgct ggcattctgc tggtagcatg agtttccagg ctggaggaga 1200
112 agacactggg cagtgaagat ggtgacatgt ttcataatag gacttctttt tctgtcttc 1260
113 tctgtgtgct acctgatagc tcccaaaagc ccacttggac tgttcatcag gaagccattt 1320
114 atcaagttta tctgccacac agcctcctat ttgacttttt tgttcctgct gctgcttgcc 1380
115 tctcagcaca tcgacaggtc agacttgaac aggcaaggtc caccaccaac catcgtcgag 1440
116 tggatgatat taccgtgggt cctgggcttc atatggggag aaattaaaca gatgtgggat 1500
117 ggcggacttc aggactacat ccattgattgg tggaaatctaa tggactttgt aatgaactcc 1560
118 ttatattttag caacaatctc cttgaaaatt gttgcatttg taaagtacag tgccttaat 1620
119 ccacgagaat catgggacat gtggcatccc actctggtgg cagaggcttt atttgctatt 1680
120 gcaaacatct tcagttctct gcgtctgatc tcaactgtta ctgcaaattc tcacctggga 1740
121 cctctgcaaa tatctctggg aagaatgctc ctggacattt tgaagtttct attcatatac 1800
122 tgcttgtgtg tgctagcatt tgcaaatggc ctaaatcaat tgtacttcta ttatgaagaa 1860
123 acgaaagggt taacctgcaa aggcataaga tgtgaaaagc agaataatgc attttcaacg 1920
124 ttatttgaga cactgcagtc cctgttttgg tcaatatttg ggctcatcaa tttatatgtg 1980
125 accaatgtca aagcacagca tgaatttact gagtttgttg gtgccaccat gtttgggaca 2040
126 tacaatgtca tctctctggt tgttctactc aacatgttaa tagctatgat gaataattct 2100
127 taccaactga ttgctgacca tgcagatata gaatggaaat ttgcacgaac aaagcttttg 2160
128 atgagttatt ttgaagaagg aggtactctg cctactccct tcaatgtcat ccgagcccc 2220
129 aagtctctct ggtacctgat caaatggatc tggacacact tgtgcaagaa aaagatgaga 2280
130 agaaagccag aaagtttttg aacaataggg aggcgagctg ctgataactt gagaagacat 2340
131 caccaatacc aagaagttat gaggaacctg gtgaagcgat acgttgctgc aatgattaga 2400
132 gatgctaaaa ctgaagaagg cctgaccgaa gagaacttta aggaactaaa gcaagacatt 2460
133 tctagtttcc gctttgaagt cctgggatta ctaagaggaa gcaaactttc cacaatacaa 2520
134 tctgcgaatg cctcgaagga gtcttcaaat tcggcagact cagatgaaaa gagtgatagc 2580
135 gaaggtaata gcaaggacaa gaaaaagaat ttcagccttt ttgatttaac caccctgatt 2640
136 catccgagat cagcagcaat tgctctgaa agacataaca taagcaatgg ctctgccttg 2700
137 gtggttcagg agccgcccag ggagaagcag agaaaagtga attttgtgac cgatatcaaa 2760
138 aactttgggt tatttcatag acgatcaaaa caaatgctg ctgagcaaaa tgcaaaccaa 2820
139 atcttctctg tttcagaaga agttgctcgt caacaggctg caggaccact tgagagaaat 2880
140 attcaactgg aatctcgagg attagcttca cggggtgacc tgagcattcc cgtctcagt 2940
141 gaacaatgtg tgttagtaga ccatagagaa aggaatacgg acacactggg gttacaggta 3000
142 ggaaagagag tgtgtccatt caagtcagag aaggtggtgg tggaggacac ggttcctata 3060
143 ataccaaaag agaaacatgc aaaagaagag gactctagta tagactatga tctaaacctc 3120
144 ccagacacag tcacccacga agattacgtg accacaagat tgtgatactt gaaggaggaa 3180
145 gcgtttacca tacacatacg tattttccgt agtgcctctg gtgggggaaa atgtttaaat 3240
146 tgtattagca aatgctaact tacactttat agcatttatc agctgtggca tattacctgt 3300
147 aacatgttta aattaaggca aaggcaatca aaaacctttt tgttttgtag cctgcttttg 3360
148 ctttcacaat ttgtcttaca attgtttttg ttaataaata aatgcacctt gaaaaaaaaa 3420
149 aaaaaaaaaa aaaaaaaaaa

```

151 <210> SEQ ID NO: 3

152 <211> LENGTH: 19

153 <212> TYPE: DNA

154 <213> ORGANISM: Artificial Sequence

156 <220> FEATURE:

157 <223> OTHER INFORMATION: Oligonucleotide antisense

RAW SEQUENCE LISTING

DATE: 02/14/2005

PATENT APPLICATION: US/10/500,493

TIME: 08:08:38

Input Set : A:\14848-006US1.TXT

Output Set: N:\CRF4\02142005\J500493.raw

159 <400> SEQUENCE: 3

160 gataggcgtg atgtctggg

19

VERIFICATION SUMMARY

DATE: 02/14/2005

PATENT APPLICATION: US/10/500,493

TIME: 08:08:39

Input Set : A:\14848-006US1.TXT

Output Set: N:\CRF4\02142005\J500493.raw